

#### 4. Gerhard Stickel:

##### Leibniz And German As A Language Of Science<sup>1</sup>

Two years ago, one of the four major German science organisations representing about 80 institutes named itself "Wissenschaftsgemeinschaft Gottfried Wilhelm Leibniz" (Science Society Gottfried Wilhelm Leibniz; WGL). The German Language Institute is also a member of this society. It was predominantly the representatives of the natural science institutions who chose Leibniz as their patron, motivated by the wish to be recognised in the international world of science under the illustrious name of this eminent polymath. As I found to my surprise, most of the Leibniz admirers in the natural sciences were hardly aware that this eminent lawman, philosopher, mathematician, physicist and inventor had also given important impulses to linguistics. My intention is not to deal with Leibniz as a language theoretician and language researcher. Instead, I want to recall a small part of Leibniz's work which every now and then is also noted in the liberal arts: his writings on, and for, the German language.

The two minor works in question are no strictly scientific treatises, but essay-like memorials. The older of the two, presumably written around the year 1682, is entitled "Ermahnung an die Deutschen, ihren Verstand und ihre Sprache besser zu üben, samt beigefügtem Vorschlag einer deutschgesinnten Gesellschaft" (Exhortation to the Germans to better exercise their reason and their language, with the added suggestion of a German-minded society; EaD). In newer editions, the second essay carries the title "Unvorgreifliche Gedanken, betreffend die Ausübung und Verbesserung der deutschen Sprache" (Unpremeditated thoughts on the practice and the improvement of the German language; UG) and was written around the year 1697, almost 300 years ago. Both works were published posthumously<sup>2</sup>.

In these writings, Leibniz perceives a crisis of language in late 17th century Germany. The crisis is determined by

- a society divided by two languages, the uneasy co-existence of the German vernacular and Latin and French as the language of politics and the scholars, and, related to it,
- a deficiency in use and in the development of the German language.

He quotes several reasons for the backward development of language culture in Germany: the Thirty-Year's War which had ended only a few decades earlier, the absence of a German capital, and the "religious schism" (EaD, 61). But the people most

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<sup>2</sup> In older editions, the titles are: „Ermahnung an die Teutsche, ihren verstand und ihre spräche beßer zu üben, sammt beygefügetem vorschlag einer Teutsch gesinten Gesellschaft" (first 1717, then in: Pietsch 1916, 292-312) and „Unvorgreifliche Gedancken betreffend die Ausübung und Verbesserung der Teutschen Sprache" (first in 1868, then in: Pietsch 1916, 327-356). The following quotations follow the edition of Uwe Pörksen 1983 which are easier accessible and modernised in terms of language and spelling. With reference to the texts used in this edition and on the full source history, cf. the details on p. 79 f. and p. 103 f.

to blame for the language misery, he says, are the scholars, many of whom feel little inclination to care for the German language:

“... partly because some appear to believe that wisdom cannot be clothed in anything but Latin and Greek; or because some may fear that the world may discover their secret ignorance masked in big words” (EaD, 62).

And a few lines later he writes:

“In Germany, however, too much has been ascribed to Latin and the Arts and too little to the Mother Tongue and to Nature, which has had a detrimental effect both among the scholars and on the Nation itself. The scholars, writing almost solely for other scholars, delve all too often into useless things; but those among the entire Nation who have no knowledge of Latin are, as it were, excluded from science [...]”.

Leibniz deals in a differentiated manner with the “mish-mashers” who “intersperse their writings with all kinds of languages” (EaD, 68), characterised by the offers at the semi-annual book fairs which, even at that time, were held at alternating venues in Frankfurt and Leipzig:

“I call as witnesses what comes forth from the half-yearly fairs; wherein much is thrown in such despicable disarray that many appear not to know what they write. Yea, it seems some people have forgotten their German and have not learned their French. I wish to God that one paper were to be among ten of such flying pamphlets which a stranger could read without laughing and a patriot could read without rage!” (EaD, 66f.)

Leibniz is anything but a language purist; he is against the pedantic avoidance of foreign words:

“Now I am not so superstitiously German to think that I wished to weaken the force of a powerful speech for the sake of a none too German word”. (EaD, 69)

But then he continues:

„This alone, however, is no excuse for those who sin not from need but from negligence [...]. If they say that, after much deep thought and nail-biting, they have found no German word good enough to express their wonderful ideas, they truly display more of the paucity of their alleged eloquence than the excellence of their ideas”. (EaD, 69)

Remarkably, Leibniz repeatedly advocates the development of German as a language of science in his “Exhortation” and later in his “Unpremeditated thoughts”, drawing a line between himself and the language societies which had already developed before his time and which aimed to establish German as the language of literature. Leibniz argues that it is not the language of poetry, but the language of science which ought to further the general positive language development (cf. EaD, 65). Besides some plausible statements and remarkable proposals, his “Exhortation to the Germans” also includes some utterances which, in their patriotic pathos, are today difficult to understand and misleading, for instance the autostereotype also recurring in his “Unpremeditated

thoughts” of the honest and guileless German who would be incapable of meaning anything false or ambiguous, or a maxim such as: “Better to be an original of a German than a copy of a Frenchman” (EaD, 75). These and other formulations have time and again been taken up with chauvinist undertones in the Leibniz reviews since the 19<sup>th</sup> century. For Leibniz, the patriot who had always seen himself as a European scholar, France had always been an admired ideal; his critique of language and culture was not directed against France, but against the Germans aping the French.

More attractive in linguistic terms are his “Unpremeditated thoughts on the practice and the improvement of the German language”, a small selection from which I wish to present here. His main thrust is again the development and upkeep of German as a language of science. He outlines a consistent, nominalist semantic theory which deserves attention to this day:

“In the use of the language, particular attention ought to be paid to the circumstance that the words are not only the symbols of thoughts but also of things and that we need symbols not merely to indicate a change of mind but also to help our thoughts themselves”. (UG, p.6)

And shortly after, he says:

“Words are therefore often needed as ciphers or as reckoning pennies instead of the images or things, until one gradually proceeds to the summary and reaches the thing per se in the logical conclusion” (UG, p. 7).

Evolving from here, Leibniz then discusses the German language and its condition and use at the time. His assessment of the status of development of German for terms expressing concrete things, for everything perceptible through the senses, is positive (s. UG, p. 8), although he sees substantial deficits in all things abstract, as he says:

“in our language in those things which we can neither see nor sense, but which we can reach only by observation...” (UG, p. 8f.).

Again, Leibniz blames the scholars for these developmental defects in the German language, because they

“make use of Latin or other foreign languages almost to the exclusion of everything else and almost to such an extent that it is not their lack of capability, but their lack of will which prevents the Germans from asserting their own language” (UG, p. 9).

But, in the same breath, he turns against any manifestation of petty language purism:

“The opinion is therefore not to become a purist in language and, in superstitious anxiety, to shun a foreign but convenient word like a deadly sin, and so to enfeeble oneself and to deprive one’s speech of weight” (UG, p. 11).

But the language “mish-mash” which has “grown repulsively out of hand” and with which “one spoils one’s German with abominable French” (UG, 12) he believes to be a serious danger. Replacing one language by another means confusion for “a hundred or more years“,

„[...] until everything that has been stirred up has settled again and, like a fermented beverage, has finally clarified. Meanwhile, the German minds, by necessity, must sense no small measure of obscurity through the uncertainty in speaking and writing, because most will not grasp the power of foreign words for a long time and would write miserably and would think badly; not unlike languages changing noticeably in times of invading barbarity or foreign forces” (UG, 13).

Leibniz' appeal to scientists and politicians to apply the German language in an exemplary manner is followed by a detailed programme involving the exploration and cultivation of the German language, which is often invoked by later linguists and people concerned about their own language. His recommendations are aimed mainly at the acquisition and further development of the German vocabulary in several lexicographic projects, which he explains by means of many practical examples and suggestions. Leibniz thus became the great originator and driving force for the major dictionary projects since the 18th century.

Beyond practical lexicography, Leibniz' diagnosis of the state of the German language 300 years ago and his therapy suggestions will still allow us to gain some useful applications for the present and the near future.

With all the caution necessary when comparing the centuries, there are certain similarities between the Holy Roman Empire of the German Nation towards the end of the 17<sup>th</sup> century and Germany at the end of the 20<sup>th</sup> century. Both are post-war eras. The Thirty Year War had left most of Germany devastated. Victorious France had risen to become the leading power, with the small and medium German states taking their lead from France. Although Germany did not break up into many quasi-autonomous principalities after 1945 as it did after the Thirty Year War, the country was divided. Of the two initial superpowers USA and USSR, it is now English-speaking America which has prevailed. The USA is today seen as the dominant role model in politics, business,, science and in many fields of the everyday, increasingly 'macdonaldised' trivial culture.

In both eras, the German language is not particularly appreciated, especially by the more educated sections of the population. After all, German was, and is, the language of the losers. After the Second World War, the awareness also grew that German had also been the propaganda language of the Nazis, and that atrocious crimes had been planned in German and the commands for their execution had been screamed in German. In the minds of many sensitive Germans, their own language had also become guilty during the Nazi period. Although this does not make much sense when seen as a hypostatisation of language, it is nonetheless understandable, not least because of the symbolic quality which Leibniz also ascribes to language.

Linguistic auto-odium is only one of the reasons for the attitude to language in post-war Germany. English, particularly in its US American embodiment, has also grown in attractiveness in countries where there was no need to struggle with guilt or shame in the wake of the Nazi period. The path to English leads, above all, through practical communicative constraints which, in turn, arise from the increasing internationalisation of many walks of life. And, at this point, there are some very important differences between our times and those of Leibniz.

Leibniz wrote in pre-national Germany with a glance to France, England and Spain, countries which had already consolidated as unified nation states. In these countries, the former language of administration and learning – Latin – had been replaced in many important areas by the respective national language, i.e., by French, English and Spanish. This is a stage of evolution which the German language had not yet reached by the late 17<sup>th</sup> century. It was not until the middle of the 18<sup>th</sup> century with the works of Christian Wolff that German began to assert itself as a language of science, particularly as a language of philosophy. With his exhortations, Leibniz played his part in developing German after the period of Enlightenment not only into a language of literature and law, but gradually also into a language of science in the German-speaking countries and regions. In some disciplines such as philosophy and theology, but also in chemistry and medicine, German grew in importance at one time even beyond the borders of the German-speaking countries. German has so become the fully developed language of culture in which we live and communicate today. Or do we?

The language development which Leibniz had hoped for and promoted in his “Unpremeditated thoughts” and his “Exhortation to the Germans” appears to regress recently. In business and – particularly important for us - in science, everything can conceivably be said in German and, with adequate effort, may be seen as a matter of course, but we are now a long way away from saying and writing everything in German. The often unreflected and unthinking adoption of anglicisms as terms and workshop turns of phrase in many disciplines is only part of this development. What is more worrying is that a number of scientific disciplines have virtually abandoned the German language and have migrated to English, at least in their publications. The monolinguality of the scientific communication which prevailed in Germany in the first post-war years is so gradually being replaced by the monolinguality of scientific English.

The reasons for this development have already been addressed. Science needs discussion and cooperation beyond the language borders, and English (at present mostly in a reduced manifestation) is after all available as lingua franca, auxiliary language and language of communication. The proficiency in English of German-speaking scientists is normally sufficient for publications in which tables, diagrams, graphs or formulas are conveyed. But when it comes to discursive texts in which theoretical prerequisites, methods and results are developed both in interpretative and argumentative terms, the issue is more problematic as this entails a great deal of effort even with a good command of the foreign language and is often not very convincing as a product of formulation.

One factor which appears to be more serious than the often rather poor English of German scientists is that shifting essential areas of the scientific communication into another language excludes large portions of society – which, after all, carry science financially - from partaking in science. I am not going to indulge in the myth of a linguistically ideal science which is capable of making itself understood by everybody. But the access to scientific subjects, as difficult as these are already, should not be made unnecessarily more difficult for laymen – *and these include colleagues from other disciplines*.

There is also another factor: an acute danger to the continued language development. In the disciplines in which English is the sole or predominant language of communication,

German as technical language does not develop any further; it atrophies to the point of uselessness within the individual discipline, and even more so as the medium of communication among the disciplines and beyond the sciences. The argument that the knowledge of English among Germans is on the increase does not lead us any further. Several generations will pass before the majority of Germans are bilingual or even trilingual (even in Switzerland with its long tradition and experience in multilinguality, most people today are monolingual). The more English develops into the dominant or even exclusive language of science in Germany, or, more to the point: *is made into the dominant language by German scientists*, the more the German language will lose in value because a division of function will set in over time: important matters must be said and written in English, German is left for nice trivialities and for the evening among friends...

This development is currently being intensified (and there is nothing comparable in Leibniz' time) by the trend towards English as language of communication in the European Union. In the absence of a convincing concept in terms of linguistic policy, the wealth of languages in Europe, *i.e. the very basis of the cultural and linguistic variety in Europe*, could, for reasons of communicative economy alone, develop towards a Euro-English monolinguality and monotony, with languages such as German existing only as backward idioms in folkloristic niches.

Naturally, returning to German as the exclusive technical language of science provides no way out of this dilemma. Top research, in particular, should continue to speak English if it wants to be understood quickly within the international science community<sup>3</sup>. This does not mean, however, that the local scientists comply with their duty to disseminate information by adhering to English. A well-developed bilinguality or multilinguality also among those scientists who are especially dependent on international co-operation remains possible and desirable.

Natural scientists and their staff should be encouraged to lecture and publish both in German and in English. This may require some effort, for instance in terminology development, which should not be delegated solely to the German Institute for Standardisation (DIN) or to Germanistics. Also, the test suggested by Leibniz, namely to translate a foreign turn of phrase into German and to test it for its content (cf. UG, p.9) could be helpful and instructive.

The national patriotic motives which Leibniz quotes in his "Unpremeditated thoughts" and his "Exhortation" can no longer be quoted today as the crucial reasons for developing and sustaining German as the language of science. We ought to remember Leibniz who called for the linguistic responsibility of science towards a society essentially constituted in terms of language, a society which makes science possible and needs science. And equally important is the linguistic contribution which science can, and should, make in maintaining and developing German among Europe's rich and varied wealth of languages.

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<sup>3</sup> See Markl 1986

## Literature

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